

“Mission First - - Safety Always”

Agency Safety Initiative (ASI)

February 26, 1999
(D)

Presenter:

**Frederick D. Gregory
Associate Administrator
Office of Safety and Mission Assurance**

Executive Rollout

Mission First -- Safety Always

Agency Safety Initiative

NASA will be the nation's leader in safety and occupational health and in the safety of the products and services we provide.

NASA ensures safety and health for:

- **The Public**
- **Astronauts and Pilots**
- **Employees**
- **High Value Equipment and Property**

Today we establish the management commitment for this initiative.

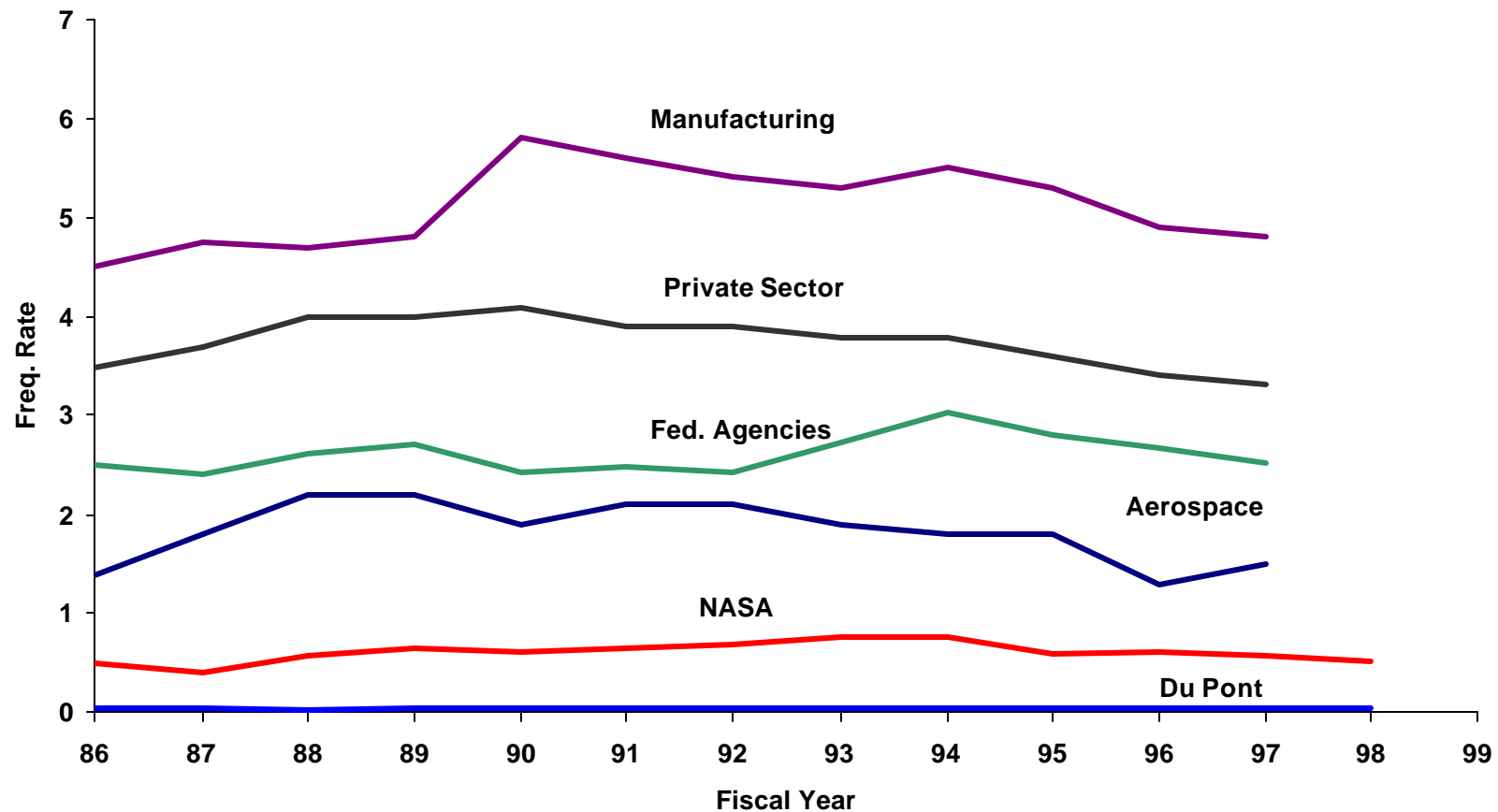
Current Agency Safety & Health Metrics

Federal Worker 2000

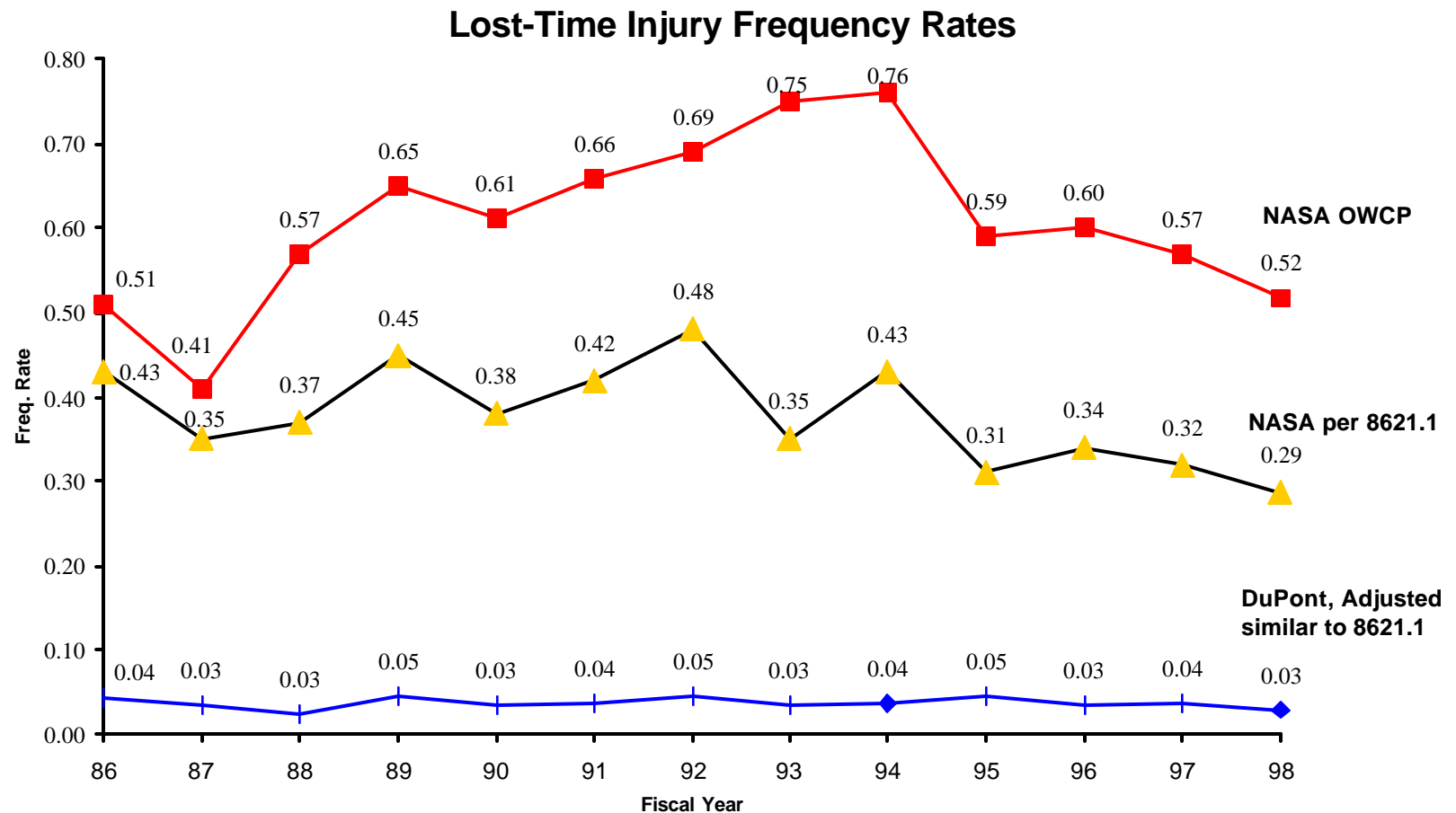
Jonathan Mullin, Code QS

Current Agency Safety & Health Metrics

**NASA's Safety Performance Lost Time Cases per 100 Employees
(Data from Department of Labor)**



Current Agency Safety & Health Metrics

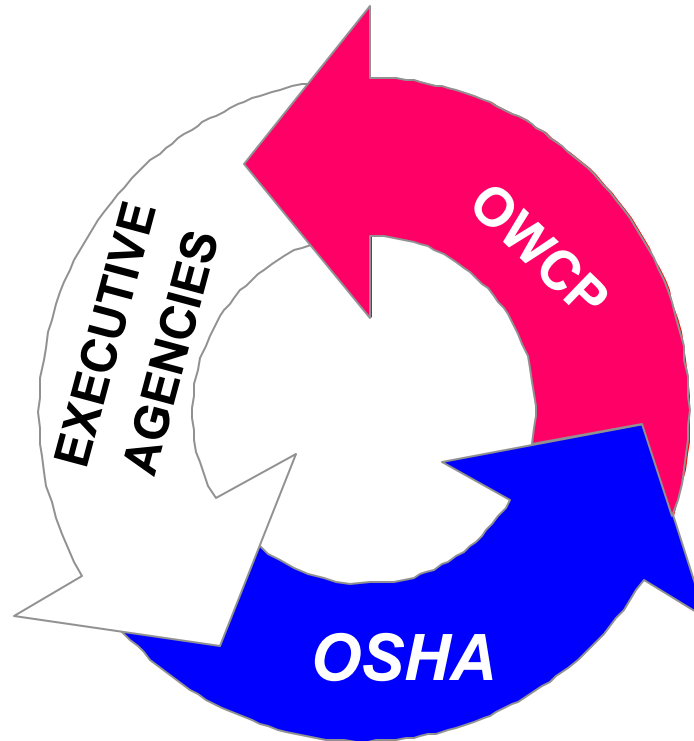


OWCP is Department of Labor Data.

NASA OWCP Versus 8621.1

- **There are OWCP reportable injuries that are not considered NASA lost time cases**
- **Exclusion rules are documented in NPG 8621, NASA Procedures and Guidelines for Mishap Reporting, Investigating, and Recordkeeping**
- **For example:**
 - **Injuries occurring in a public conveyance while on official travel**
 - **Injuries resulting from non-work related, preexisting musculoskeletal disorders**
 - **Injuries experienced during unsupervised or unsponsored recreational activities**

FEDERAL WORKER 2000



***Working Together For Safer and Healthier
Federal Workplaces***

Federal Worker 2000

- 160,000 reported injuries and illnesses in Federal workplaces each year
- Annual payment of nearly 2 Billion Dollars (NASA - \$7.3M) in workers' compensation costs

To address these human and financial costs Federal Worker 2000 was developed and is to be issued by a Presidential Executive Order.

The program has been presented to Senior Government Officials at a White House management briefing.

Federal Worker 2000

Federal Worker 2000 will:

- **Charge Cabinet Officers and Agency Administrators to get more involved in safety and health programs**
- **Raise Agency awareness of the human and financial costs of the high incidence of workplace injury and illness**
- **Establish measurable goals to improve or reduce major safety and health related indicators**

The Presidential initiative parallels actions already being worked by NASA through the ASI.

Federal Worker 2000

GOAL 1 Reduce the overall occurrence of injuries by 3% per year, while improving agencies' timeliness in reporting by 5% each year.

- **FY97 is the Base Year**
- **Government-wide Total Case Rate (TCR) = 5.63 injuries/100 employees**
- **Agencies with TCR above 2.00 to reduce their rate 3% per year for 5 years**
- **Those below 2.00 to maintain their rate**
- **For the past 4 years, NASA's TCR has been below 2.00. In 1998, NASA's TCR was 1.00.**

Federal Worker 2000

GOAL 2 Reduce by 10% the Lost Time Case Rate (LTCR) for those agency worksites with the highest rates.

- **FY97 Federal Agencies average 2.51 cases per 100 employees**
- **Agency worksites with LTCR's greater than 5.4 will be asked to work toward a 10% reduction per year.**
- **NASA Agency average LTCR has historically been well below 5.4. In 1998, NASA's LTCR was 0.52.**

Federal Worker 2000

Goal 3 Reduce the rate of Lost Production Days (LPDR) by 2% per year.

- **LPDR is a new metric for the Federal government**
- **NASA is addressing this far more aggressively through changes in back to work policy**

These goals are being developed in a policy letter from the AA/OLMSA and AA/OSMA to be issued after receipt of the E.O.

Federal Worker 2000

- **OSHA and OWCP will track and measure the accomplishment and success of Federal agencies towards meeting their goals and provide feedback to the agencies on an annual basis**
- **Report annually to the White House on the status of these goals**
- **Conduct spot checks to gauge progress by randomly inspecting 10% of the worksites with the highest LTCR annually**
- **Presidential awards will be given at the conclusion of the program**

E.I. duPont de Nemours & Co., Inc.

“Achieving World-Class Safety Performance”

John (Jack) H. Welch

**Vice President of Operations,
Packaging and Industrial Polymers Strategic
Business Unit**

E. I. duPont de Nemours & Co., Inc.

Presentation

Achieving World-Class Safety Performance

National Aeronautics and Space Administration

Washington, D.C.

February 26, 1999

John H. Welch

Vice President of Operations

Packaging and Industrial Polymers Strategic Business Unit

Diverse Operating Environments

- Manufacturing
- Research and Development
- Oil Exploration/Production
- Construction
- Coal Mining
- Sales Fleet
- Railroad Operations
- Trucking Fleet
- Marine
- Distribution
- Corporate Aviation



Chairman
John Krol

President/CEO
Charles Holliday

**Office Of The
Chief Executive**

Executive Vice President
Kurt Landgraf
Europe
Life Sciences

Senior Vice President
Gary Pfeiffer
Chief Financial Officer

Executive Vice President
Archie Dunham
President/CEO, Conoco

Sr Vice President
W. Kirk
South America
Ag Enterprise

Crop Protection
Ag R&D
Ag Biotech
Biotech R&D
DuPont Pharm.

Sr Vice President
D. Reilley
United States
Differentiated Businesses

Advanced Fiber Systems
Specialty Chemicals
Nonwovens
Lycra®
White Pigments

Sr Vice President
S. Mobley
Canada/Mexico
Ext. Affairs

Corian®
Packaging & Ind. Polymers
Safety Resources
Automotive Products
Photopolymrs & Elctnc Mat'ls

Sr Vice President
J. Miller
Chief Tech Off
Cent Sci & Engg

Polyester Films
Polyester Resins & Int.
Fluoroproducts
Engineering Polymers

Sr Vice President
E.J. Van Wely
Asia Pacific
Foundation Businesses

Nylon
Dacron®
DuPont Dow Elastomers

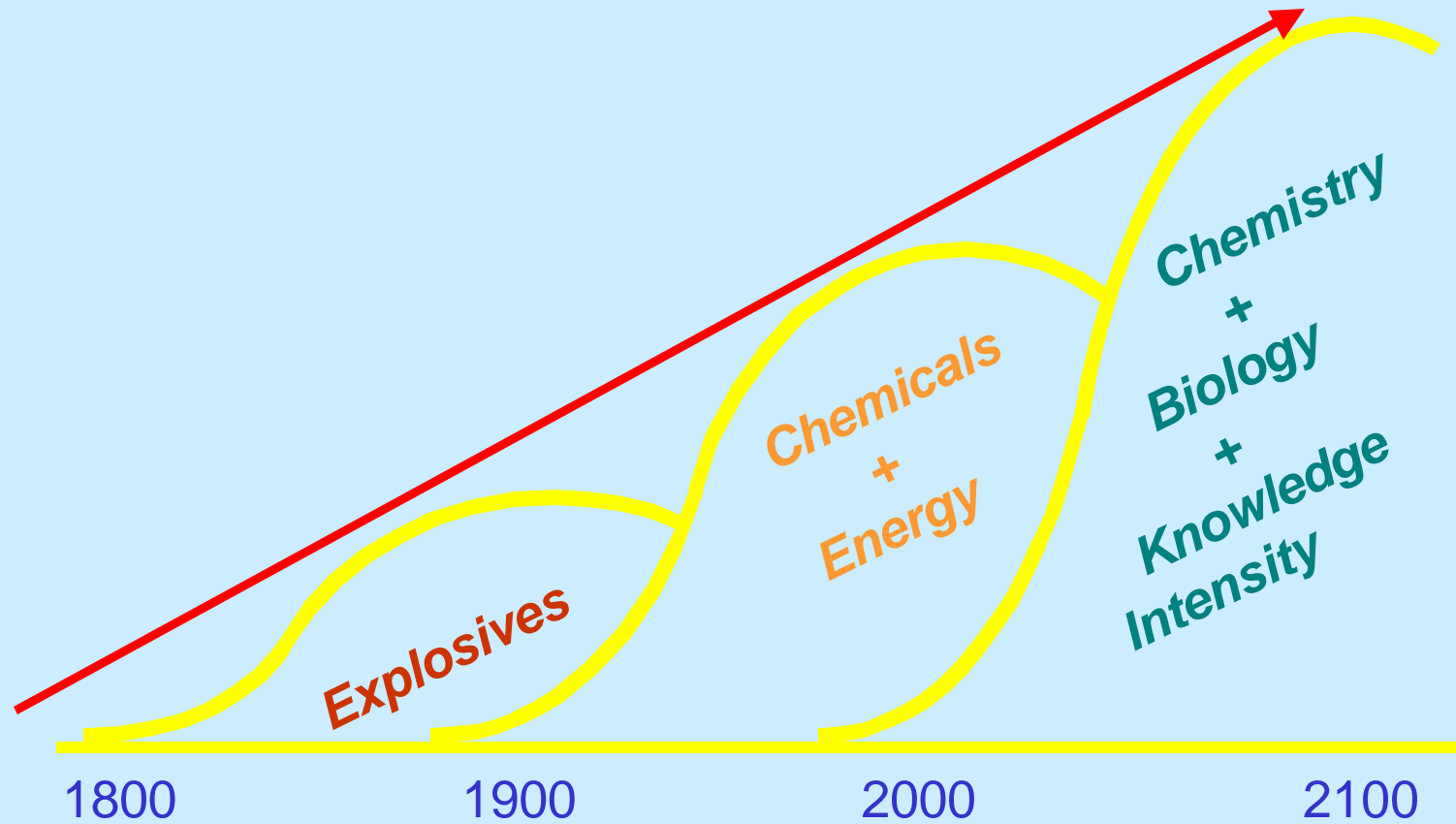
Sr Vice President
C Hallman
Int. Processes & Systems

Sourcing Information Continuous Global
Systems Business Improve. Business
Services

Ex VP, Conoco
R. McKee
Exp & Prod
(Upstream)

Ex VP, Conoco
G. Edwards
Refng & Mktg
(Downstream)

REINVENTED FOR EACH CENTURY

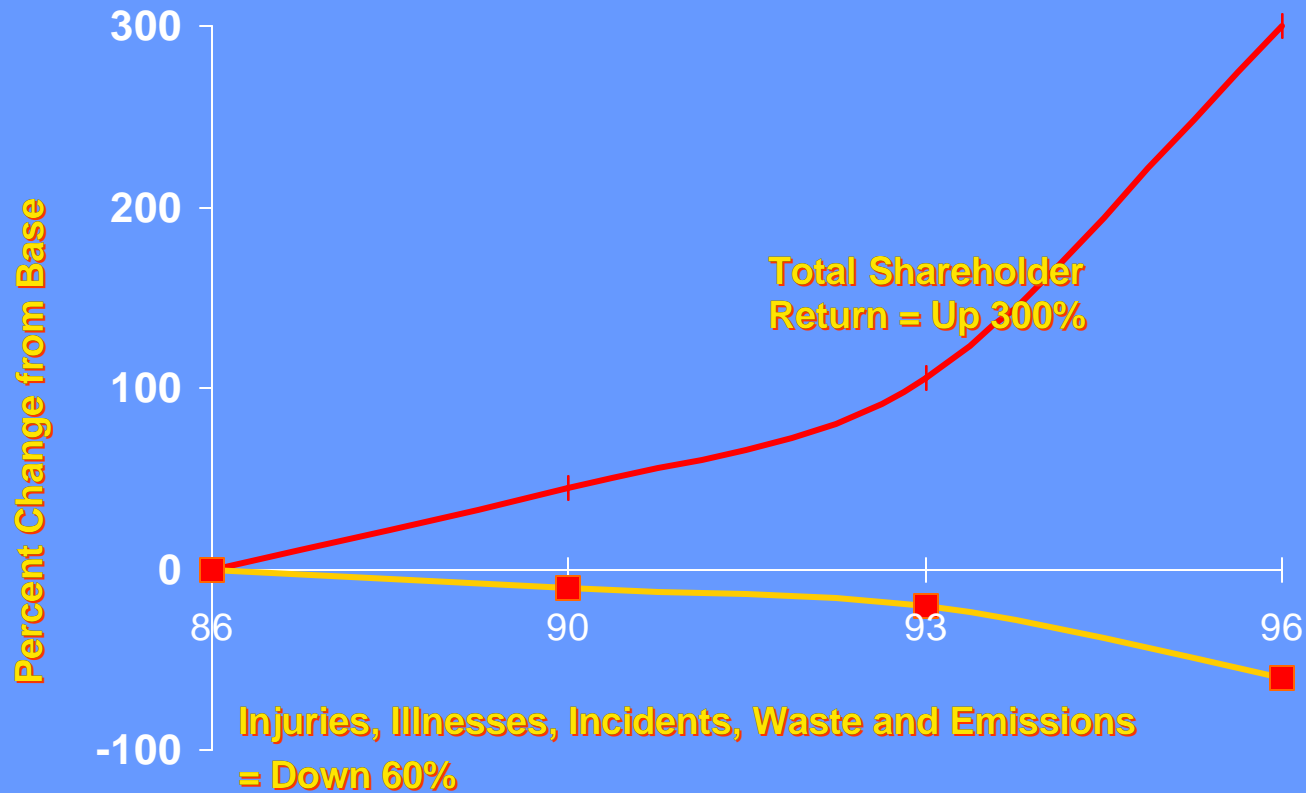


DuPont's Core Values

- Discovery and Innovation
- Safety, Health, and Environment
- Ethical Behavior
- Valuing People

Safety is Good Business

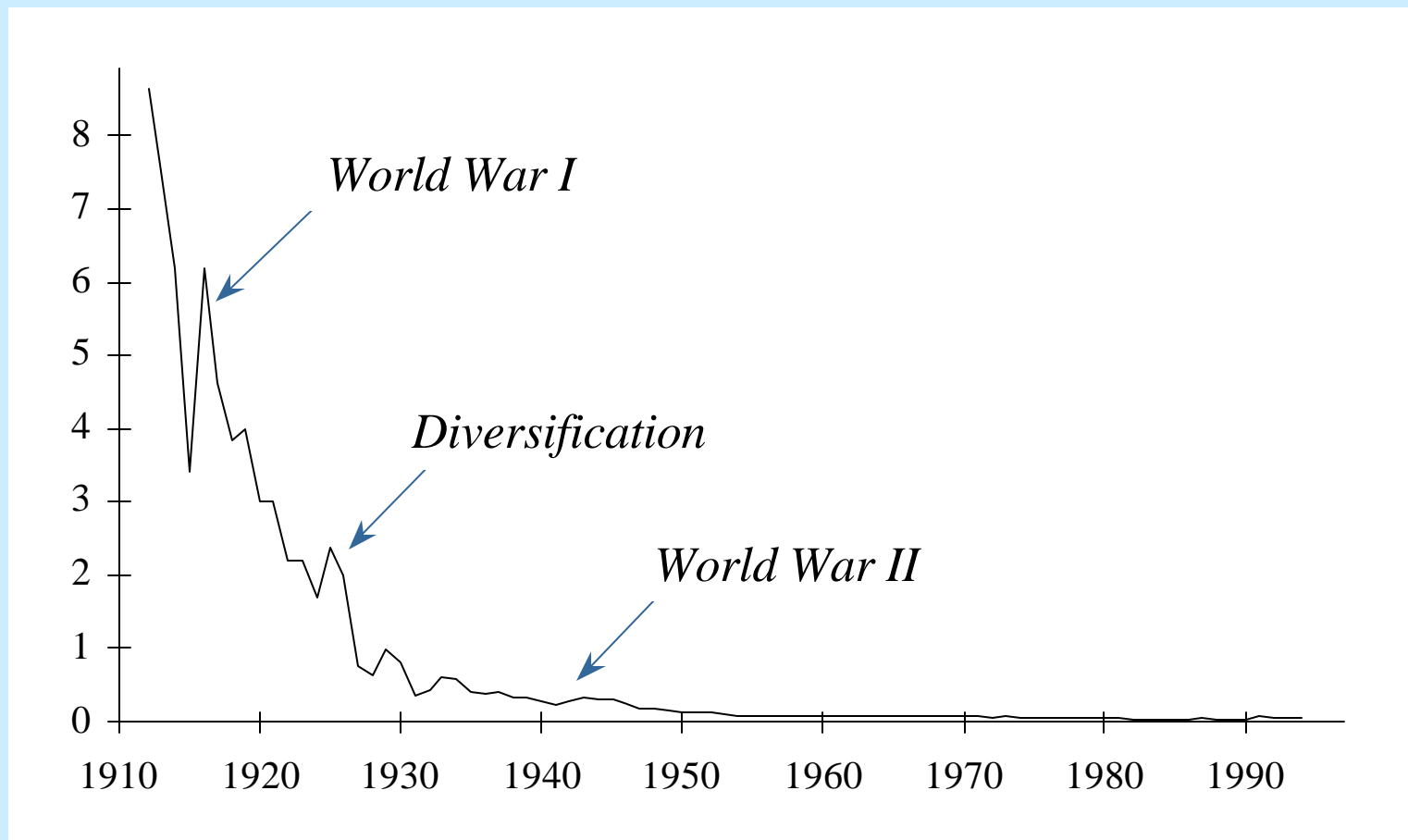
Good for People, Good for the Environment



Over the past 10 years, DuPont's total shareholder return has increased 300% while injuries, illnesses, incidents and major sources of waste and emissions are down 60%.

DuPont Safety Performance

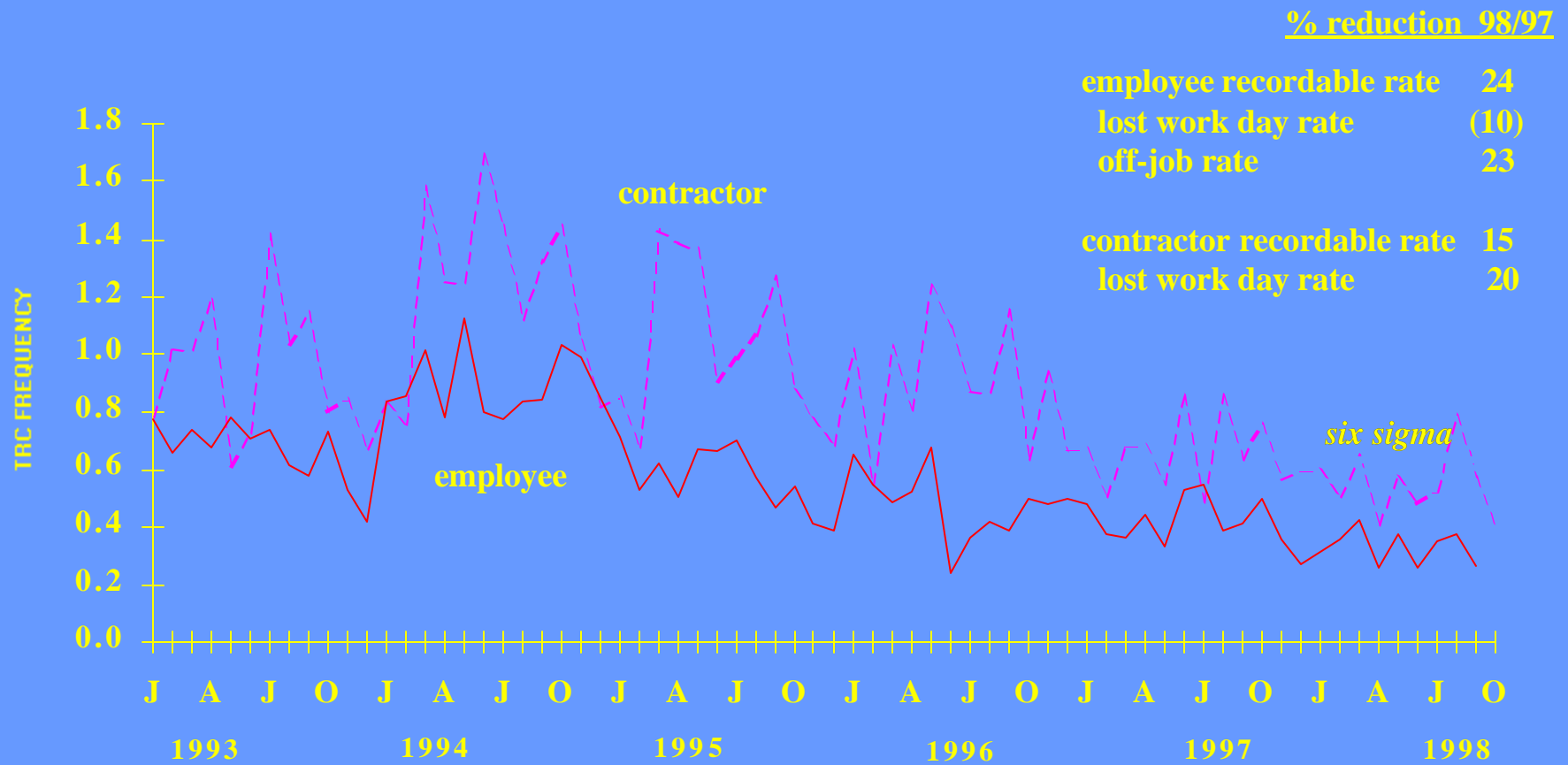
LWC's/200,000 man-hours



GLOBAL C&S

TOTAL RECORDABLE FREQUENCY

"THE GOAL IS ZERO"



DuPont Safety Performance Worldwide (1998)

- 97,000 employees
- 28 lost workday cases
- 0.030 lost workday cases per 100 employees
- 0.328 total recordable cases per 100 employees
- 0.317 cases per 100 employees (off the job)

Fundamental Beliefs at DuPont

- Safety is a core business and personal value.
- Safety is a source of competitive advantage.

We will strengthen our business by making safety excellence an integral part of all business activities.

The Goal Is Zero

We believe that all injuries and safety and environmental incidents are preventable—our goal is zero.

We will promote off-the-job safety for our employees.

Core Elements of DuPont's Safety Approach

- Top management commitment
- Responsibility and accountability of all employees
- Clearly communicated expectation of zero incidents
- Auditing and measuring for improvement
- “Felt leadership” by all employees

The Leadership Challenge

#1: Leadership Commitment

- Visible, unconditional support at highest levels
- Constancy in purpose
- Clearly stated objectives
- SHE integrated into all processes

The Leadership Challenge

#2: Responsibility and Accountability

- **All** levels of leadership accountable for SHE performance
- Standards and rules
- Operating discipline
- Condition of employment/contract

The Leadership Challenge

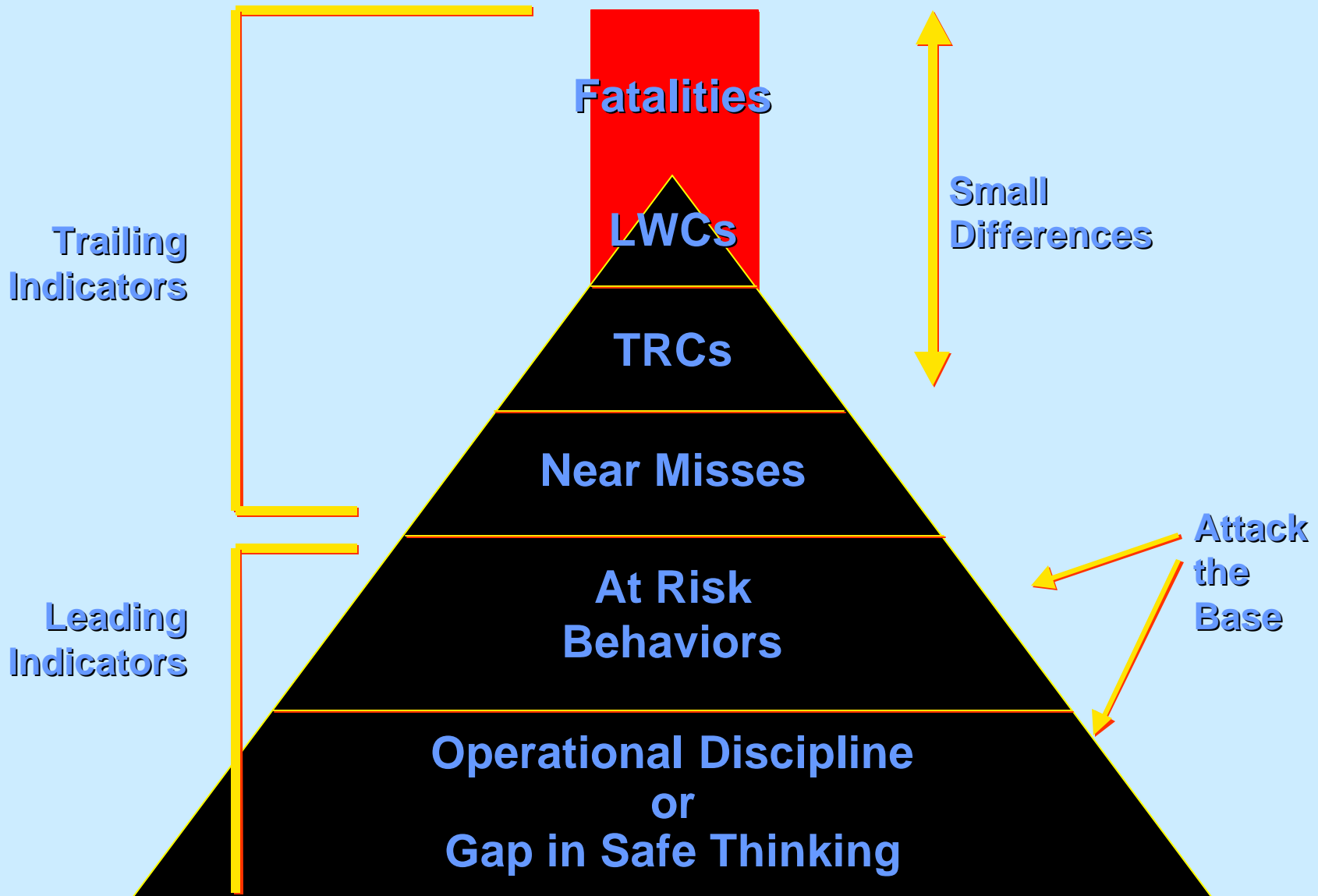
#3: Expectation of Zero Incidents

- All incidents and injuries are preventable
- The Goal is Zero—Our constant safety theme
- Constant communication/reinforcement,
on and off the job

The Leadership Challenge

#4: Auditing/Verification

- Measure performance
 - Trailing indicators (senior leadership level)
 - Leading indicators (site level)
- Continuous improvement



The Leadership Challenge

#5: ‘Felt Leadership’ by Everyone

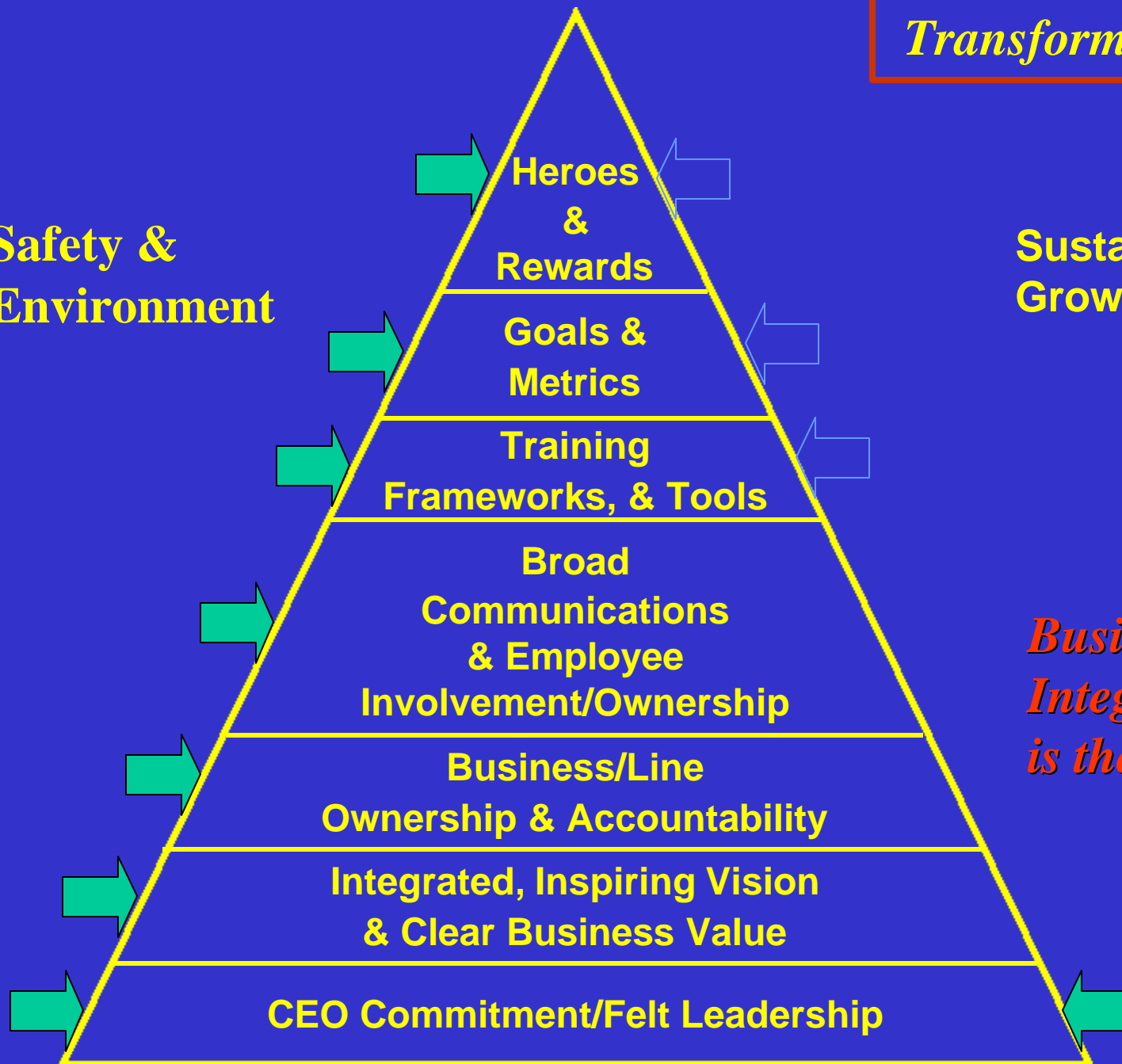
Peer-to-peer responsibility, felt by all

- Responsible for co-workers' safety
- Coaching peers in safe work practices
- Sharing experience—successes and failures
- Taking action for safety

Transformation Model

**Safety &
Environment**

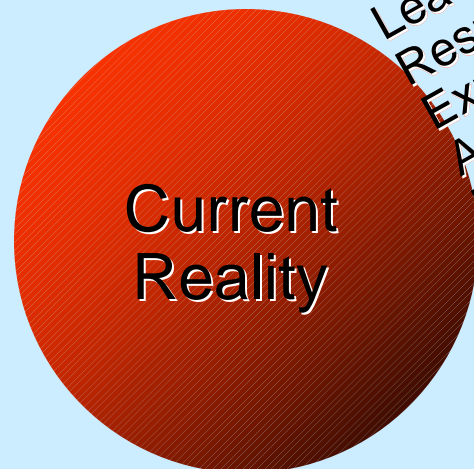
**Sustainable
Growth**



***Business
Integration
is the Key!***

The Leadership Challenge

**Business
Excellence**



Leadership Commitment
Responsibility & Accountability
Expectation of Zero Incidents
Auditing/Verification
Felt Leadership

**Business Excellence
Through Safety**

The Leadership Challenge

**We will only achieve
the level of safety
that we demonstrate
we want.**

Safety and Health Policies

Overview of the Safety and Health Policies and Functional Management Structure

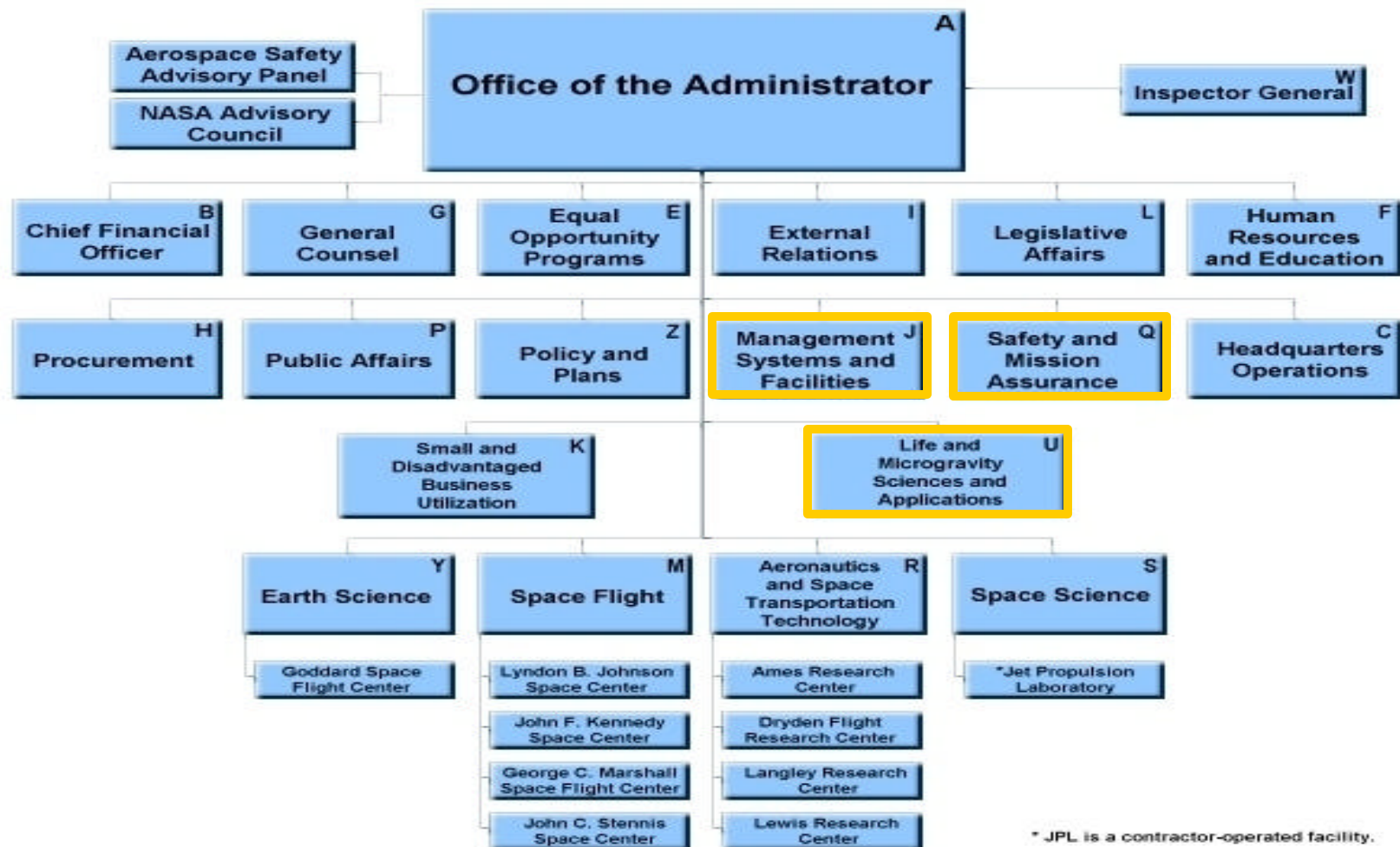
Wayne Frazier, Code QS

DASHO Role

The Designated Agency Safety and Health Official (DASHO) assists the agency head in establishing:

- **Agency policy to carry out the requirements of OSHA**
- **An organization with adequate staffs and budgets to implement the occupational safety and health (OSH) program**
- **Procedures that ensure effective implementation of the agency policy**
- **Goals and objectives for reducing and eliminating occupational injuries and illnesses**
- **Procedures for evaluating the agency's OSH program effectiveness**
- **Priorities to reduce the factors which cause occupational injuries and illnesses**

Safety and Occupational Health Functional Management Interfaces



Safety and Health Policies

Principal Policies and Documents

- Executive Order 12196, Occupational Safety and Health Programs for Federal Employees
- 29 CFR Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters
- NPD 8700.1, NASA Policy for Safety and Mission Success
- NPD 8710.2, NASA Safety and Health Program Policy
- **NPG 8715.1, Safety and Health Handbook**
- NPG 8715.2, NASA Safety Manual
- **NPG 8621.1, NASA Mishap Reporting, Investigating, and Recordkeeping**
- NPD 8710.1, NASA Emergency Preparedness Program
- NPD 1800.2, NASA Occupational Health Program
- NPC 1150.1, Occupational Health and Safety Executive Board
- NPD 7100.8, Protection of Human Research Subjects

Update of Safety and Health Handbook

Changes to support ASI:

- **Executive level Safety and Health Committees now required at each Center**
- **Summaries of open abatement plans and a listing of those closed during the reporting year will be provided to HQS (DASHO or designee) in parallel with the Center's input for the annual OSHA report**
- **Centers will provide self evaluations of their Safety and Health Programs using the OSHA baseline questionnaire as a part of their annual OSHA report.**

Update of Mishap Reporting Requirements

Changes to support ASI:

- Increased emphasis on “Close Call” reporting
- Focus on root cause analysis
- Increased emphasis on training for Investigation Board members
- Increased emphasis on corrective action tracking and status
- A more centralized process for Lessons Learned development

The Agency Safety Initiative (ASI)

James D. Lloyd

**Director, Safety and Risk Management Division
Office of Safety and Mission Assurance**

Expectation and Goal

Expectation: Zero mishaps in the NASA workplace.

Goal: NASA will be the nation's leader in safety and occupational health and in the safety of the products and services we provide

Who Benefits?

The Agency safety and health program promotes and ensures safety and health for:

The Public

Astronauts and Pilots

Employees

High Value Equipment and Property

...and is applied throughout the NASA workplace in:

Earth

Low Earth Orbit

Troposphere/Stratosphere

Deep Space

World Class Safety & Health Program

Core Process Requirements (CPRs):

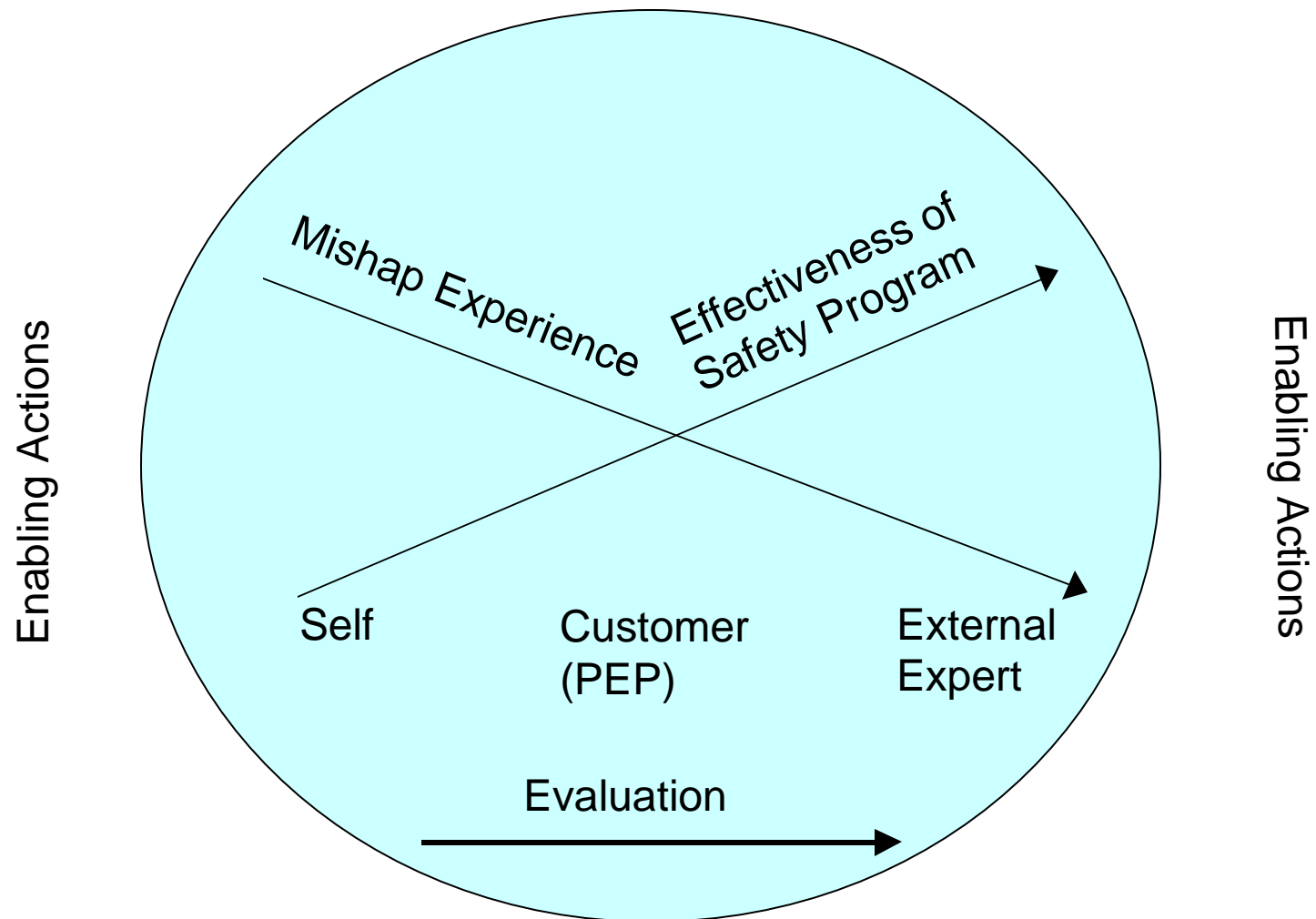
CPR 1 Management Commitment and Employee Involvement

CPR 2 System & Worksite Hazard Analysis

CPR 3 Hazard Prevention and Control

CPR 4 Safety & Health Training

Agency Safety Initiative



Enabling Actions

- Action Teams with members from NASA Centers and HQ Codes were formed to work 13 actions
- To date there are 41 enabling actions
 - 13 are closed
 - 8 are short term (< 6 months)
 - 20 are long term (> 6 months)

Closed Enabling Actions

- **Administer a Center Director's Safety & Health Program Self-evaluation**
- **Develop words for the Strategic Plan**
- **Develop safety & health performance standards for managers**
- **Administrator's ASI Policy Letter**
- **Identify systems, equipment, and facility safety and health risks and proposed upgrades and improvements**

Safety Related Facility Needs

- **Administrator directed JX/Mr. Brubaker at 8/98 SMC: “Fix facility safety problems and we’ll cut programs if necessary.”**
- **Codes J and Q jointly developed survey and format**
- **Centers completed survey 11/98 and updated with schedule 2/99**
- **Facility safety review made a part of Core Capability Assessment 2/99**
- **Centers initially reported \$220 M, but cut to \$190M after further assessment and interim mitigation measures**
- **Many Centers programming fixes out through FY05**
- **Should fix worst first by end of FY00, but will cost \$60M-\$140M depending on sustainability of interim mitigation measures.**

Short Term Enabling Actions

- **Implement safety & health performance standards for managers**
- **Administer the employee and management PEP Surveys (1999)**
- **Develop metrics & measures for safety & health**

Longer Term Enabling Actions

- AA's ASI status report to Administrator (end of year)
- Outreach work with other Federal Agencies and international partner's safety & health counterparts
- Develop medical requirements for emerging mission requirements
- Promulgate human factors and human error avoidance in Agency activities
- Assure the systematic evaluation and elimination of hazards in all NASA endeavors
- Conduct a Safety Awareness Day for 1999
- Create a "Mission First-Safety Always" video

Center Director's Self-Evaluation

Vyga Kulpa, Code Q, MSFC

CHECK LIST

SAFETY & HEALTH PROGRAM CORE REQUIREMENT



Report of Self-Evaluation

1) Management Commitment &

Employee Involvement:

	Fulfilled? Yes/No:	CAP * Yes/No:	Metric Yes/No:
(i) Worksite Policy Documentation	<input type="text"/>	<input type="text"/>	<input type="text"/>
(ii) Clear Goal Established & Communicated	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iii) Full Management Involvement in Implementation	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iv) Full Employee Involvement in Safety Program	<input type="text"/>	<input type="text"/>	<input type="text"/>
(v) Assigned/Communicated Responsibilities	<input type="text"/>	<input type="text"/>	<input type="text"/>
(vi) Authority and Resources Provided	<input type="text"/>	<input type="text"/>	<input type="text"/>
(vii) Professional Safety and Health Staff	<input type="text"/>	<input type="text"/>	<input type="text"/>
(viii) Center Staff Held Accountable	<input type="text"/>	<input type="text"/>	<input type="text"/>
(ix) Annual Reviews Conducted	<input type="text"/>	<input type="text"/>	<input type="text"/>

2) Worksite Hazard Analysis:

(i) Baseline Surveys Completed and Updated	<input type="text"/>	<input type="text"/>	<input type="text"/>
(ii) Analysis Performed for New Work	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iii) Hazard Analyses Performed for All Jobs	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iv) Safety & Health Inspections Occur Regularly	<input type="text"/>	<input type="text"/>	<input type="text"/>
(v) Hazard Reporting System in Place	<input type="text"/>	<input type="text"/>	<input type="text"/>
(vi) All Mishap/ "Close Calls" Investigated and Hazards Corrected	<input type="text"/>	<input type="text"/>	<input type="text"/>
(vii) All Injury, Illness, "Close Call" Trend Data Analyzed	<input type="text"/>	<input type="text"/>	<input type="text"/>

3) Hazard Prevention & Control:

(i) Hazard Id. Processes & Measurements Established	<input type="text"/>	<input type="text"/>	<input type="text"/>
(ii) Facility & Equipment Maintenance Conducted	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iii) Emergency Prep. Planning & Training Conducted	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iv) Emergency Medical Care Program Established	<input type="text"/>	<input type="text"/>	<input type="text"/>

4) Safety & Health Training:

(i) Employees Trained to Id, Understand & Prevent Hazards	<input type="text"/>	<input type="text"/>	<input type="text"/>
(ii) Supervisors Trained to Control Hazards	<input type="text"/>	<input type="text"/>	<input type="text"/>
(iii) Managers Trained to Understand Safety & Health Issues	<input type="text"/>	<input type="text"/>	<input type="text"/>

* Corrective Action Plan

Checklist Instructions:

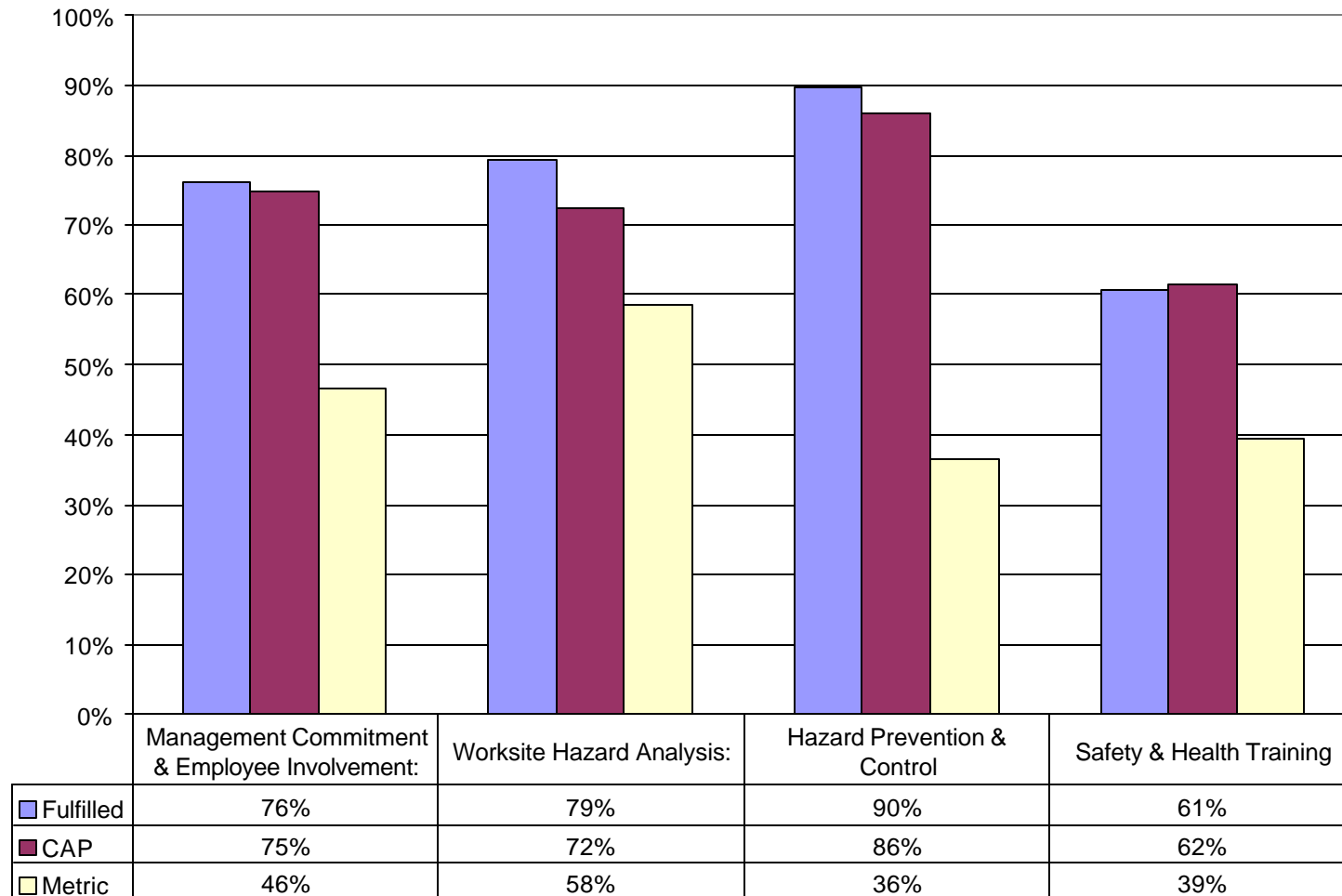
- Each box should be filled with a **Y** (for Yes) or **N** (for No)
- For every box filled with a **Y** (for Yes), supporting documentation or examples should be attached as evidence
- Completed Checklists with supporting documentation should be submitted to **Code QS at NASA HQ** by 9/15/98.

Self-Evaluation Process Metrics

Data displayed as percentage or percentage points

		Fulfilled CAP	Metric
1)	Management Commitment & Employee Involvement:	76%	75%
(i)	Worksite Policy Documentation	91	100
(ii)	Clear Goal Established & Communicated	77	91
(iii)	Full Management Involvement in Implementation	68	91
(iv)	Full Employee Involvement in the Safety Program	55	91
(v)	Assigned/Communicated Responsibilities	73	91
(vi)	Authority and Resources Provided	86	91
(vii)	Professional Safety and Health Staff	100	100
(viii)	Center Staff Held Accountable	45	82
(ix)	Annual Reviews Conducted	91	100
2)	System & Worksite Hazard Analysis:	78%	72%
(i)	Baseline Surveys Completed and Updated	64	91
(ii)	Analysis Performed for New Work	77	91
(iii)	Hazard Analyses Performed for All Jobs	64	91
(iv)	Safety & Health Inspections Occur Regularly	95	100
(v)	Hazard Reporting System in Place	95	100
(vi)	All Mishap/ "Close Calls" Investigated and Hazards Corrected	77	91
(vii)	All Injury, Illness, "Close Call" Trend Data Analyzed	73	91
3)	Hazard Prevention & Control	90%	86%
(i)	Hazard Id. Process & Measurements Established	91	100
(ii)	Facility & Equipment Maintenance Conducted	77	91
(iii)	Emergency Preparedness Planning & Training Conducted	91	100
(iv)	Emergency Medical Care Program Established	100	100
4)	Safety & Health Training	61%	62%
(i)	Employees Trained to Identify, Understand & Prevent Hazards	64	82
(ii)	Supervisors Trained to Control hazards	55	82
(iii)	Managers Trained to Understand Safety & Health Issues	64	91

Self-Evaluation Process Metrics



Corrective Action Plan (CAP) results based on November 15, 1998 data

Center Director's Self-Evaluation

Bill Wessel, LeRC

**Director, Office of Safety, Environmental, &
Mission Assurance**

Performance Evaluation Profile (PEP)

John Casper, JSC

**Director, Safety, Reliability, and Quality
Assurance Office**

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



NASA PERFORMANCE EVALUATION PROFILE (PEP)

The JSC Experience

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



WHAT IS PEP?

- Survey Providing Self-Evaluation of Your Safety & Health Program
 - **Measures Compliance with OSHA and NASA Safety & Health Regulations**
 - **Measures Progress toward VPP Star Status**

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



WHAT IS PEP?

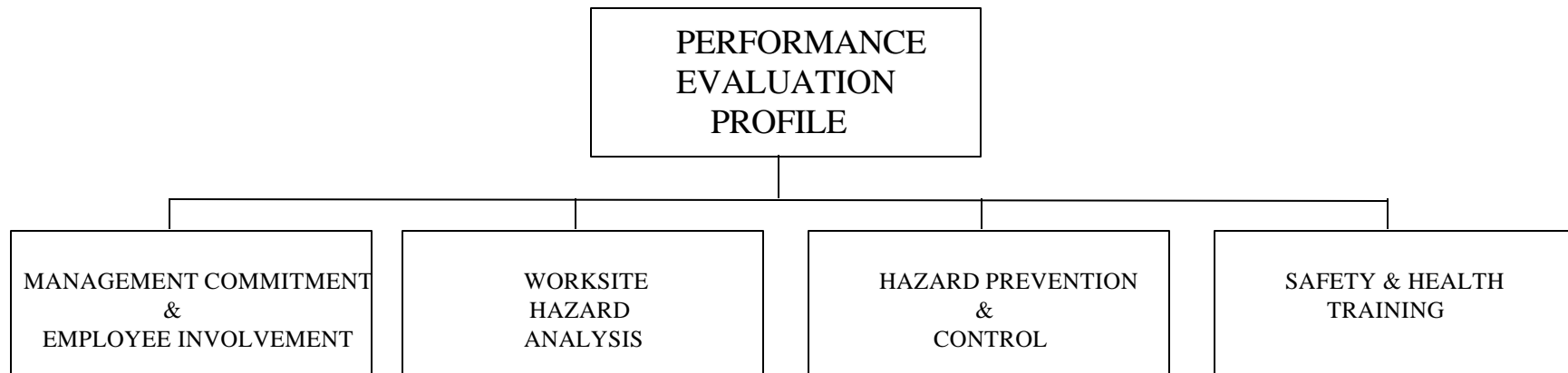
Consists of Three Surveys:

- ◆ **Management Survey** Analyzes Management View of Program Policy Implementation
- ◆ **Employee Survey** Analyzes Safety and Health Program as Actually Implemented in the Workplace Environment
- ◆ **Facility Survey** Measures Actual Work Environment

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



PEP Evaluates 4 Core Process Requirements of the ASI



JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



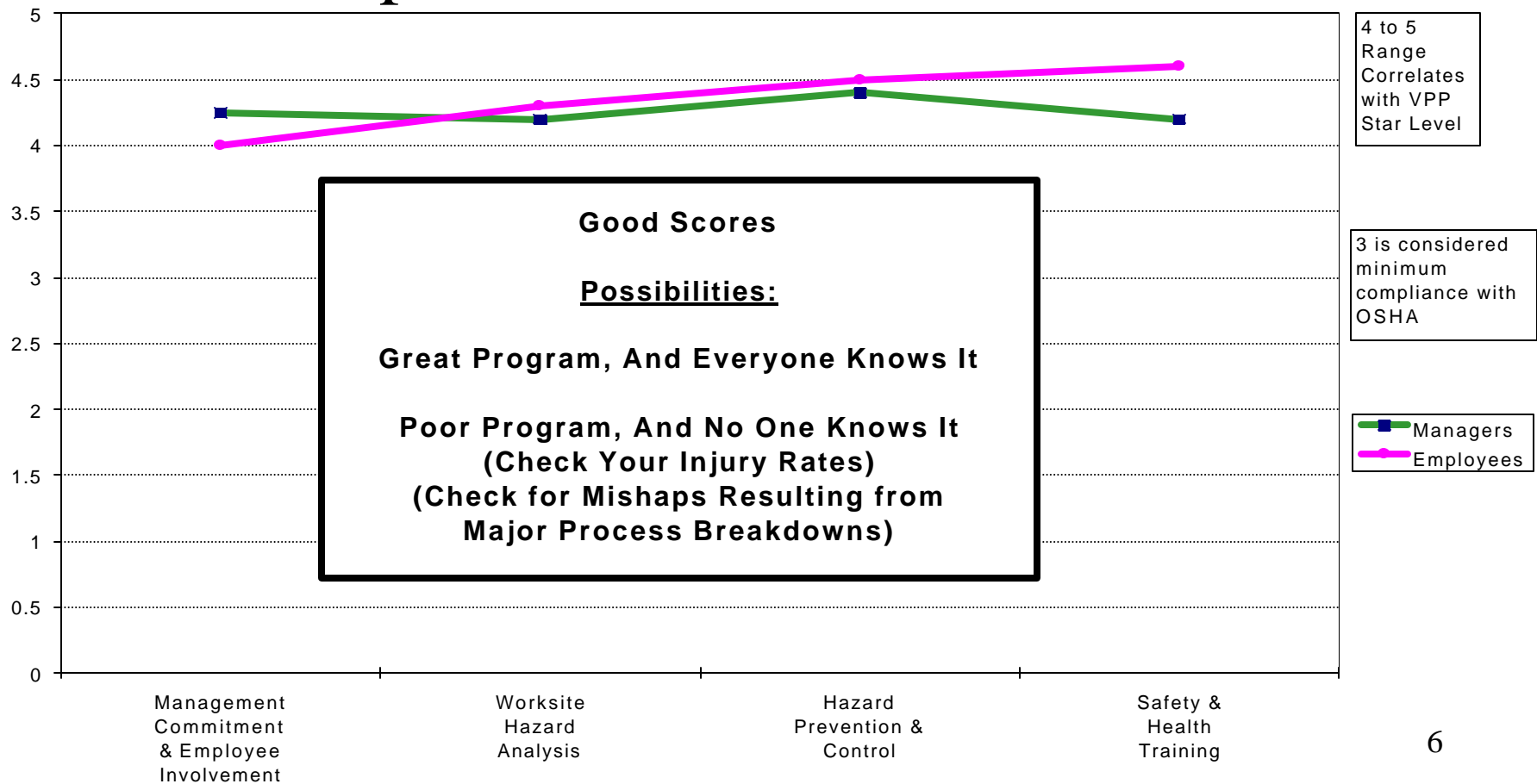
PEP Results

- Identifies
 - ◆ Differences between
 - ◆ Management's "Intended" program
 - ◆ "Actual" program experienced by employees
 - ◆ Process Deficiencies
 - ◆ Low Scores
 - ◆ Awareness Deficiencies
 - ◆ Low Scores
 - ◆ What to Do for Correction

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



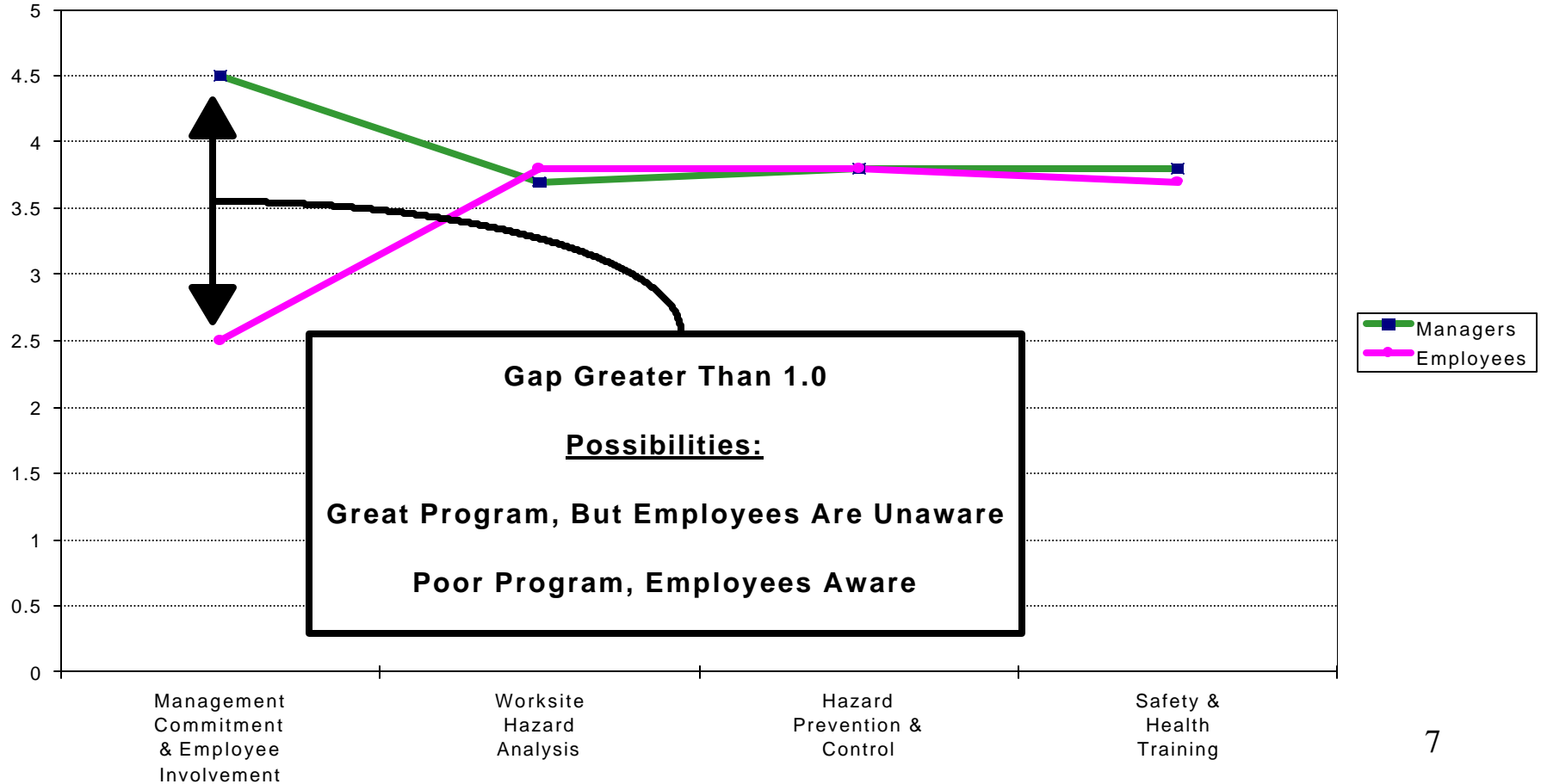
Example of Nominal Performance



JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



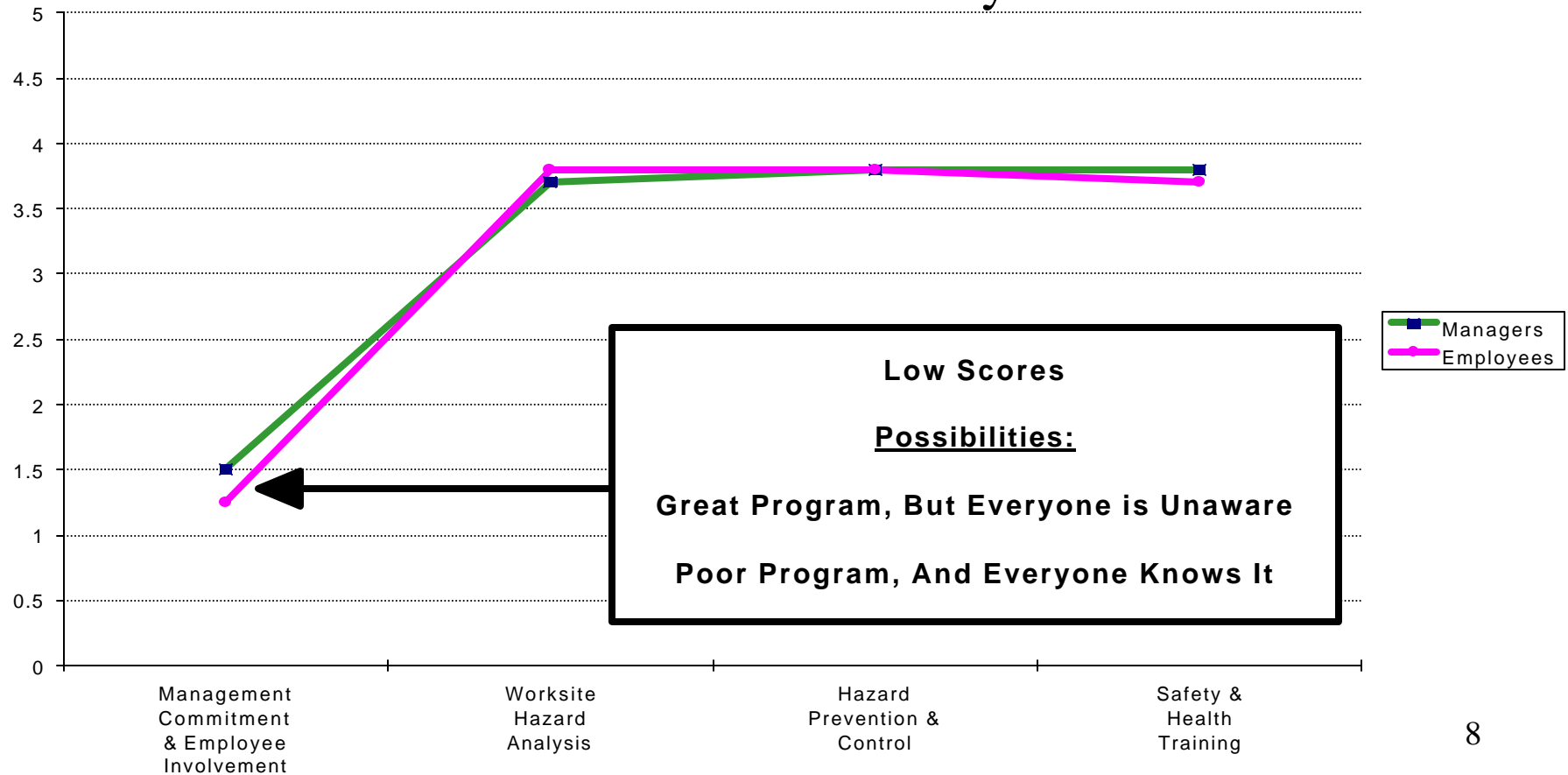
Example of GAP



JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



Example of Low Scores Awareness Problem or Process Deficiency



JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



JSC Results

On a 5 point scale with 5 being the best

- Management 3.6
- Employees 3.5

★ *Gap between management and employees*

$$3.6 - 3.5 = 0.1$$

Root Cause Analysis and Depiction was performed and briefed to each Line Organization for Corrective Action

JSC SAFETY, RELIABILITY, AND QUALITY ASSURANCE



JSC Results

- PEP is a tool, and as with any tool, can be misused
 - Accusing employees of having the “wrong perception” can backfire - “perception” IS their reality
 - Increase awareness instead
- The Employee/Management communication process is as important as the PEP Score
 - Jointly baselining current Safety & Health Program
 - Jointly planning corrective actions

VPP

Bert Garrido, LaRC

**Director, Office of Safety, Environment &
Mission Assurance**



OSHA's Voluntary Protection Program (VPP)

Senior Management Council Meeting

Bert Garrido

Director, Office of Safety, Environment and Mission Assurance

Langley Research Center

(757) 864-3361

February 26, 1999

What is it?

- **VPP began in the private sector in 1982, and was opened up to the federal sector in November 1997.**
- **The OSHA Voluntary Protection Program (VPP) is a collaborative agreement between employers and OSHA which recognizes exemplary safety and health programs.**
- **In exchange for over-compliance by employers, OSHA agrees to drop program members from its routine inspection schedules and to interact with employers as a consultant rather than an enforcer.**
- **OSHA will still respond to employee complaints and investigate accidents resulting in fatalities or hospitalization of 3 or more people. Citations may be issued as a result of these investigations.**
- **To date, 461 private work sites have been accepted into the program. Only one federal facility has been accepted.**

Why Did We Do It?

- **Pushed Langley to raise safety and health to a higher level, as desired by the NASA Administrator**
- **The application process forces identification of safety program weaknesses and development of corrective action**
- **Certification is an irrefutable third-party validation of the Center's safety program (Unbiased rigorous assessment)**
- **Continuing participation require that safety and health programs be maintained at a very high level (Who wants to be the Center Director who loses STAR certification)**

What Is Required?

- **A preliminary assessment by the OSHA Region VPP Coordinator to ensure that a good safety and health program exists (one day)**
- **The preparation of a comprehensive application which describes how the site complies with the elements of the VPP (Langley's was 420 pages)**
- **A rigorous, in-depth, on-site visit to assess the safety and health program:**
 - **Not just an OSHA Compliance audit**
 - **Focus on programs, not OSHA violations**
 - **Much attention to programs not required by OSHA regulations**
 - **Good safety attitude by everyone**

What is the Criteria for “Passing”?

- **Previous interactions with OSHA indicate open, honest and good faith relationship**
- **Injury rates significantly below the national average for similar sites**
- **Demonstrated and documented management and union commitment to the program**
- **Demonstrated implementation of the 19 VPP safety program elements**
- **Compliance with the requirements of 29 CFR 1960 (Safety and Health regulations for federal sites)**
- **Positive attitude towards safety**

What are the VPP Elements?

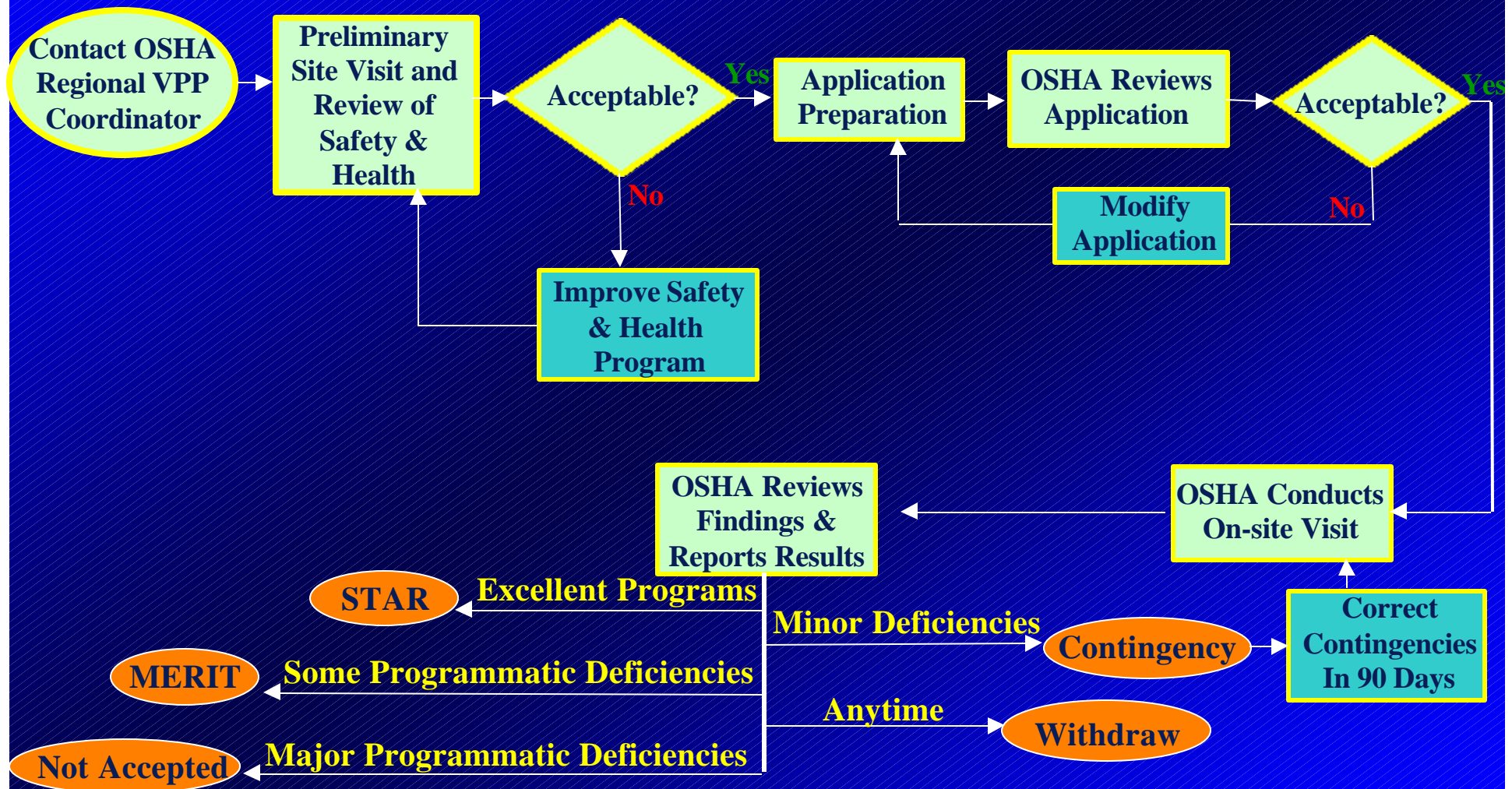
All VPP Star sites must fully comply with the following elements:

- Management Commitment ¹
- Accountability ¹
- Safety and Health Rules ¹
- Low Injury Rates
- Employee Participation ¹
- Self-Inspections ²
- Employee Hazard Reporting System ²
- Accident/Incident Investigation ²
- Hazard Analysis Procedures and Reviews ^{2,3}
- Safety and Health Training ⁴
- Preventive Maintenance ³
- Emergency Programs and Drills ³
- Health Program ¹
- Personal Protective Equipment³
- Pre-use Analysis ²
- Contractor Safety
- Medical Program ³
- Adequate Resources (Staffing & funding) ¹
- Annual Safety and Health Self-Evaluation ¹

Additionally, Federal sites, must comply with 29 CFR 1960 (Occupational Safety and Health requirements for federal work sites)

Number indicates match to NASA's Safety Core Process Requirements (CPR's)

VPP Evaluation and Approval Process



How Much Did It Cost?

- Most things would have been done with or without VPP

- Approximate incremental costs for VPP only:

- *Civil Servants overtime	\$10K
- *Additional safety/health inspections by contractor	\$60K
- Travel	\$ 3K
- Materials/Reproduction	\$ 2K
- VPP awareness banners	<u>\$ 2K</u>
<i>TOTAL</i>	<i>\$77K</i>

***Hurricane Bonnie interrupted activities for one week. A large portion of these expenses would not have been required otherwise.**

How Long Did It Take?

- **The typical private site visit takes 1-1/2 to 2 years (from declaration of intent to STAR certification)**
- **Sites without strong safety programs have taken as long as 5 years**
- **Langley took 3 months from bona fide intention to apply to end of site visit:**
 - **Langley had a strong safety program**
 - **VPP certification was managed like a project (with little slack time)**
 - **Complete Center commitment was evident by:**
 - » **Employees**
 - » **Unions**
 - » **Contractors**
 - » **Management**

Enterprise Expectations

Larry Shaw, Code Q, JSC

Enterprise Expectations

Enterprise Specific Safety and Health Strategy meetings (next 6 months)

- **Lead by Enterprise AA and direct reports**
- **Identify and address specific issues and constraints to achieving success**
- **Address approaches for achieving Agency safety and health goals and objectives**
- **Further define and implement actions that will optimize the Initiative for the Enterprise**
- **Enterprise ASI conferences (safety & health meetings) with AA's discussing safety and health with their direct reports**
- **Appointing an Enterprise Safety and Health Director**
- **Follow up with Center ASI conferences Center Directors discussing safety and health with their direct reports**

Enterprise Expectations

Annual Enterprise Safety and Health Reports

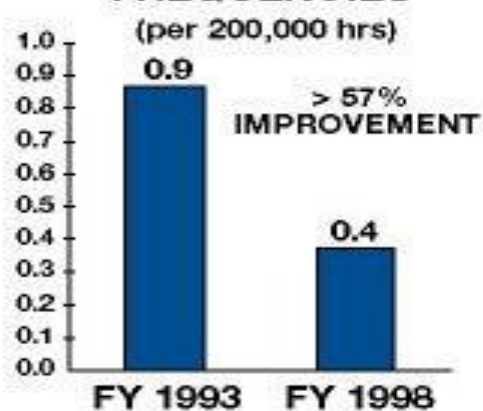
- **Performed by the Enterprise AA; given to the Administrator soon after the end of the Enterprise AAs rating period; starting this fiscal year**
- **Addresses progress against the Agency goals**
- **Includes specific actions taken to overcome problems and hurdles for achieving success**
- **Establishes the further integration of the 4 Safety and Health CPRs into the organization's business management processes**
- **As the ASI program matures, additional metrics will need to be developed to aid those responsible for accepting risks, make decisions that not only increase our chance for success, but also reduce costs associated with mishaps**

Typical Enterprise Safety & Health Metric

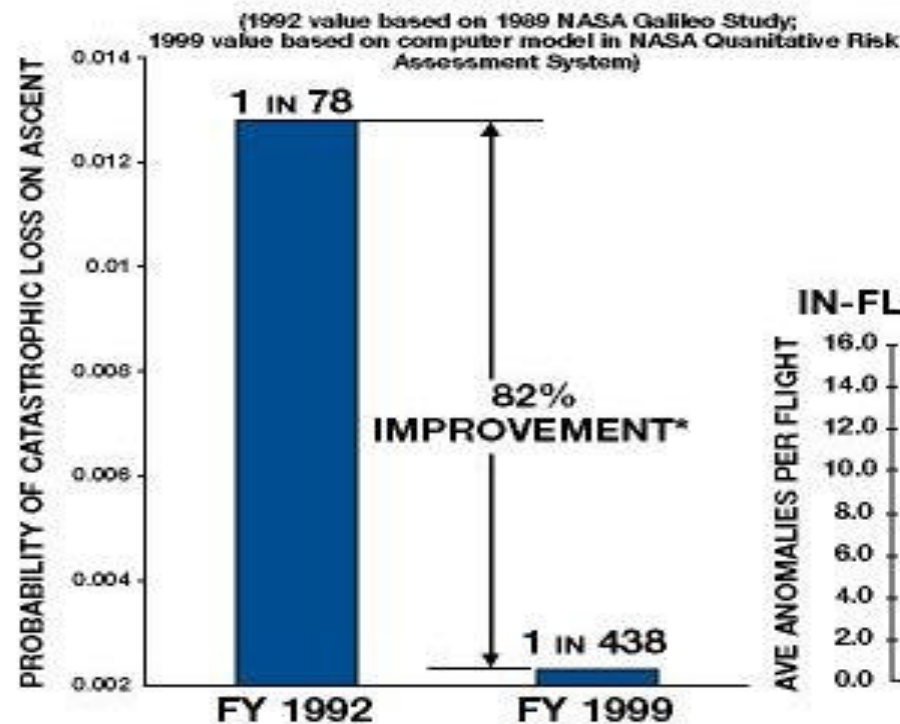


SIGNIFICANT SHUTTLE SAFETY IMPROVEMENTS

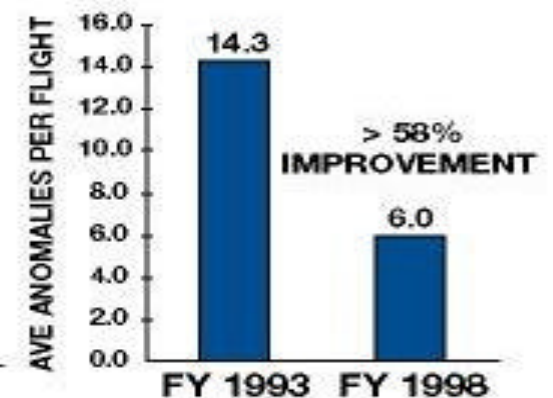
KSC MONTHLY MISHAP FREQUENCIES
(per 200,000 hrs)



SPACE SHUTTLE
PROBABILITY OF CATASTROPHIC
LOSS ON ASCENT



IN-FLIGHT ANOMALIES



FY 2000/2001 Goals Unveiled

Fred Gregory

Associate Administrator

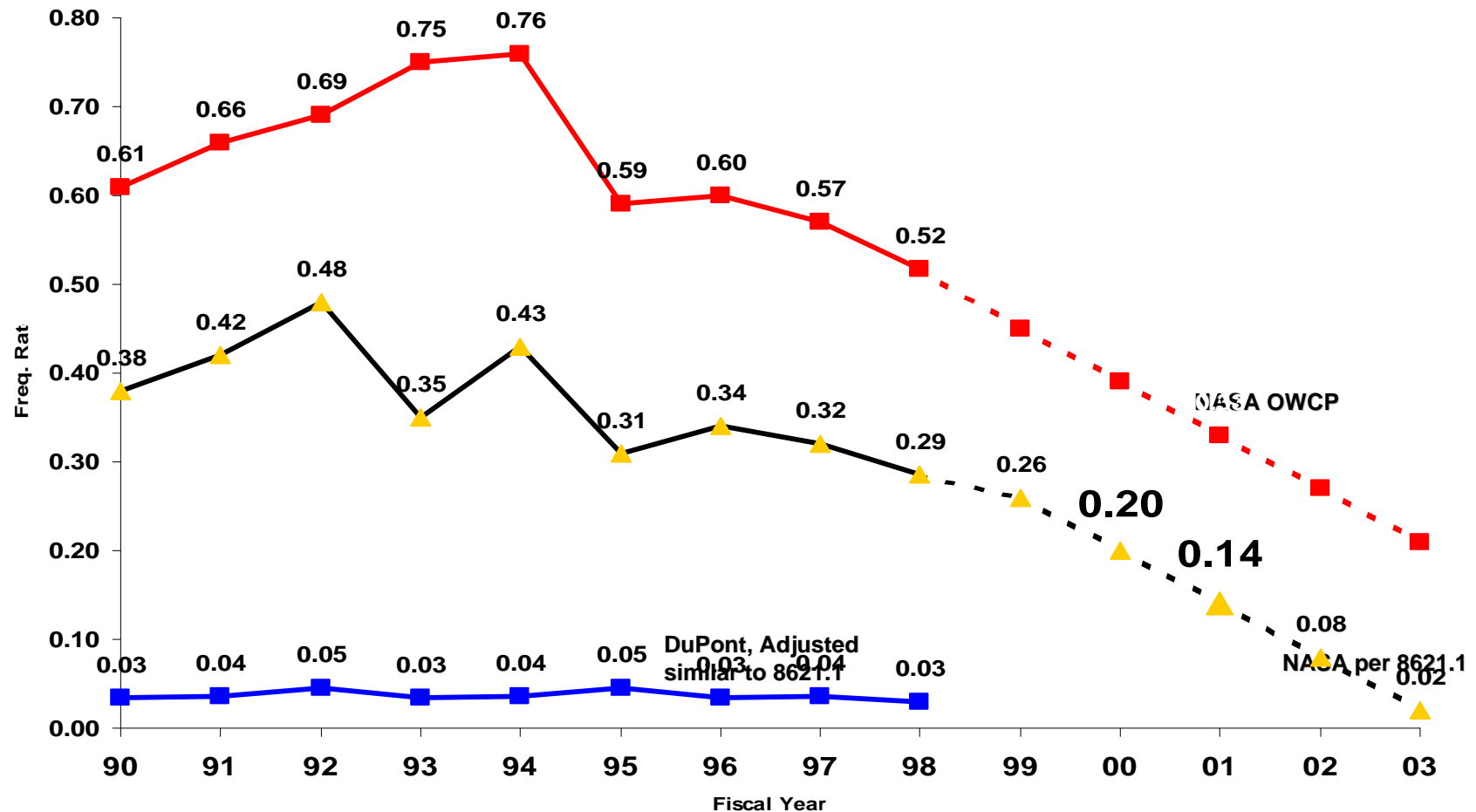
Office of Safety and Mission Assurance

Expectation and Goal

Expectation: Zero mishaps in the NASA workplace.

Goal: NASA will be the nation's leader in safety and occupational health and in the safety of the products and services we provide

Agency Safety & Health FY99 - FY04 Goals



Future Enterprise Expectations

The proposed critical element for the FY 00 performance plans for Enterprise Associate Administrators and the Associate Administrator for Headquarters Operations is:

The Associate Administrator is expected to:

1. Meet the Agency lost-time case rate goal of 0.20 (FY 00)
2. Improve the Enterprise (or Headquarters) PEP score from the baseline data collected in 1999.

These will be combined using the table below.

	Lost-time case rate goal achieved	Lost-time case rate goal not achieved
PEP goal achieved	Outstanding	Fully successful
PEP goal not achieved	Highly successful	Unsatisfactory